

[Document Type] ABSTRACT

It is an object to provide a time-domain pulsed spectroscopy apparatus in which time-domain pulsed spectroscopy of multiple samples, states thereof, and so on can be carried out easily and in a short period of time. A time-domain pulsed spectroscopy apparatus of the present invention comprises a pulsed laser light source; a splitting unit configured to split pulsed laser light from the pulsed laser light source into excitation pulsed laser light and detection pulsed laser light; a pulsed-light emitting unit; a detector; a sample holder configured to hold the sample; and sample-unit entrance and exit optical systems configured to guide the pulsed light from the pulsed-light emitting unit to the sample and to guide to the detector pulsed light reflected from or transmitted through the sample due to the irradiation; wherein the time-domain pulsed spectroscopy apparatus further comprises: at least one optical-path-length varying unit for setting a photometric range, disposed in an incident-side optical path from the splitting unit to the pulsed-light emitting unit and/or in a detection-side optical path from the splitting unit to the detector; and at least one optical delay unit for the wave form signal measurement, disposed in the incident-side optical path from the splitting unit to the pulsed-light emitting unit and/or in the detection-side optical path from the splitting unit to the detector.